MEAT QUALITY VALUES IN DIFFERENT MUSCLES BY GENOTYPE AND GENDER FROM HYBRID PIGS

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Summary. The aim of the study was to examine the effect of genotype (terminal breed), muscle and gender on the meat quality of hybrids from Lithuanian indigenous wattle pig and wild boar backcross to lean pig breeds. The animals used were females and castrated males from domestic Lithuanian indigenous wattle and wild boar hybrid backcross to domestic lean breeds (Norwegian Landrace and Yorkshire). The terminal breed influenced the growth rate and carcass fatness. The age at slaughter of hybrids from terminal Norwegian Landrace breed was 69.5 days lower, their backfat thickness at the 10 rib was 5.56 mm lower compared with the hybrids from terminal Yorkshire breed. However, Norwegian Landrace as a terminal breed showed a tendency towards lower meat quality traits, such as pH value in the longissimus and semimembranosus muscles and an increased thawing loss in the semimembranosus muscle. Gilts tended to have relatively 4.7% higher amount of dry matter and 0.7% lower pH value in longissimus muscle and relatively 3.6% lower content of dry matter and 4.0% higher content of protein than barrows in the semimembranosus muscle. However, the barrows had relatively 98.2% higher level of intramuscular fat in *M. semimembranosus* compared with gilts. The main differences between the muscle type were related to the differences in water holding capacity, cooking loss, colour and pH. Colour intensity and water holding capacity relatively 4.3% were higher, and pH value had a tendency to be higher in the semimembranosus muscle. Cooking loss had a tendency to be relatively 4.7% higher in the longissimus muscle. This study also identified several phenotypic correlations between the age, body weight and carcass fatness of hybrid pigs and meat quality traits, such as pH and water holding capacity.

Keywords: meat quality, genotype, gender, pigs, wild boar, hybrids.